

[SEMICONDUCTOR LASER DEVICE STRUCTURE AND METHOD OF MANU- FACTURING THE SAME]

Abstract

A method of manufacturing a semiconductor laser device is provided. First, a first mask layer is formed on an epitaxial structure to define a protrudent area in a ridge structure. Thereafter, a conformal second mask layer is formed over the epitaxial structure to cover the first mask layer. A third mask layer is formed over the second mask layer. The exposed second mask layer is removed. Using the first and the third mask layers as etching masks, a portion of the epitaxial structure is removed. The third mask layer and the remaining second mask layer are removed to form the ridge structure. An insulation layer is formed on the epitaxial structure and then the first mask layer is removed to expose the top surface of the protrudent area. A conductive layer is formed on the epitaxial structure such that it contacts with the top surface of the protrudent area.